

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE FIRST NAMED INVENTOR 10/27/1998 THOMAS HAAF A-65680-4/RF 9418 09/181,027 7590 06/03/2003 FLEHR HOHBACH TEST **EXAMINER ALBRITTON & HERBERT** BRUSCA, JOHN S FOUR EMBARCADERO CENTER **SUITE 3400** ART UNIT PAPER NUMBER SAN FRANCISCO, CA 94111 1631

DATE MAILED: 06/03/2003

25

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/181,027	RADDING ET AL.
	Examiner	Art Unit
	John S. Brusca	1631
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply w - If NO period for reply is specified above, the maximum statutory period will - Failure to reply within the set or extended period for reply will, by statute, c - Any reply received by the Office later than three months after the mailing die earned patent term adjustment. See 37 CFR 1.704(b). Status	(a). In no event, however, may a reply be to vithin the statutory minimum of thirty (30) da apply and will expire SIX (6) MONTHS fror ause the application to become ABANDON	mely filed ys will be considered timely. In the mailing date of this communication. ED (35 U.S.C. § 133).
1) Responsive to communication(s) filed on 13 Ma	<u>ay 2003</u> .	
2a)⊠ This action is FINAL . 2b)□ This	ction is FINAL . 2b) ☐ This action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims	r parto quayro, 1000 O.D. 11,	400 0.0. 210.
4)⊠ Claim(s) <u>40-44 and 47-55</u> is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>40-44 and 47-55</u> is/are rejected.		
7) Claim(s) is/are objected to		
8) Claim(s) are subject to restriction and/or	election requirement.	
Application Papers		
9) The specification is objected to by the Examiner.		
10) The drawing(s) filed on 27 October 1998 is/are: a) accepted or b) objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.		
If approved, corrected drawings are required in reply to this Office action.		
12) The oath or declaration is objected to by the Examiner.		
Priority under 35 U.S.C. §§ 119 and 120		•
13) Acknowledgment is made of a claim for foreign p	priority under 35 U.S.C. § 1196	a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:		
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
 3. Copies of the certified copies of the priority application from the International Bure * See the attached detailed Office action for a list of 	au (PCT Rule 17.2(a)).	
14)⊠ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).		
a) ☐ The translation of the foreign language provisional application has been received. 15)☑ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.		
Attachment(s)	, , ,	
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) S. Patent and Trademark Office	5) Notice of Informal	ry (PTO-413) Paper No(s) Patent Application (PTO-152)

Application/Control Number: 09/181,027

Art Unit: 1631

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 13 May 2003 has been entered.

Claim Rejections - 35 USC 112

- 2. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 3. The rejection of claims 47-55 under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention is maintained for reasons of record in the Office action mailed 4/25/00.

The claims are drawn to human cells comprising two recombinant nucleic acids, one comprising a Rad51 gene, and the second comprising a tumor suppressor gene. The specification does not disclose human cells comprising the two claimed recombinant nucleic acids, nor does it disclose a method of using such cells. The instant specification discloses methods of using the

Art Unit: 1631

claimed combination of nucleic acids for producing encoded proteins for use in binding assays on page 23 and for generating specific antisera for in situ staining on page 31. The specification discussed on pages 26-27 combinations of Rad51 and tumor suppressor genes for the purpose of expressing the genes individually so that the expressed proteins may be isolated and purified. The Rad51 and tumor suppressor proteins must be individually purified for use in binding assays and to generate antisera.

4. The rejection of claims 40-44 under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention is maintained for reasons of record in the Office action mailed 30 January 2001.

Response to Arguments

Applicant's arguments filed 13 May 2003 have been fully considered but they are not persuasive. The applicants point to supplied publication WO 93/22443 as providing an enabling description in the prior art of gene therapy that supports the claimed invention. However, inspection of WO 93/22443 shows that it does not disclose a working example of gene therapy. Instead it discloses a working example of gene mutation in cultured cells. The applicants argue that Orkin et al. does not show lack of enablement in the prior art for gene therapy. However Orkin does not show over 100 approved gene therapy protocols as the applicants argue, Instead Orkin discusses clinical trials of gene therapy as follows:

"Although widely referred to as 'clinical trials,' gene transfer protocols to date are in truth small scale clinical experiments. Such exploratory studies are meant to test the feasibility and safety of administering particular vectors and to evaluate the effects of expressing specific gene products. Because these studies have not been designed to

Art Unit: 1631

measure efficacy, they do not include sufficient controls to evaluate the true merits of gene therapy or compare this approach with conventional approaches to the same disease."

Orkin et al. goes on to discuss the problems with available gene therapy vectors, as summarized in Table 1. The applicants have failed to provide evidence that the prior art enables gene therapy. The applicants state that the specification provides written description for human cells as claimed in claims 47-55. However, the applicants have failed to point to description of human cells comprising the claimed recombinant constructs in the instant specification and the rejection for lack of written description is maintained.

Conclusion

5. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

Art Unit: 1631

will the statutory period for reply expire later than SIX MONTHS from the mailing date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to John S. Brusca whose telephone number is 703 308-4231. The

examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Michael Woodward can be reached on 703 308-4025. The fax phone numbers for

the organization where this application or proceeding is assigned are 703 746-5137 for regular

communications and 703 746-5137 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703 308-0196.

John S. Brusca

Primary Examiner

Art Unit 1631

isb

June 2, 2003